AUTODOC CLUB

How to change front brake pads on **BMW 3 Touring (E91)** – replacement guide

SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

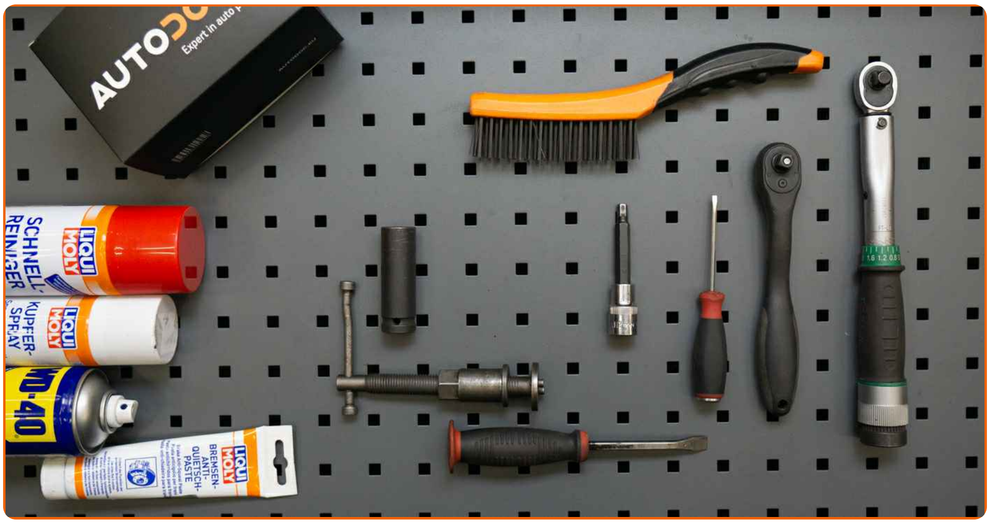
Important!

This replacement procedure can be used for:
BMW 3 Touring (E91) 316d 2.0

The steps may slightly vary depending on the car design.

This tutorial was created based on the replacement procedure for a similar car part on: BMW 3 Saloon (E90) 318i 2.0

REPLACEMENT: BRAKE PADS – BMW 3 TOURING (E91). LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Anti-squeal paste
- Copper grease
- HEX bit no.H7.
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Brake caliper wind back tool
- Flat Screwdriver
- Crow bar
- Wheel chock

Buy tools

Replacement: brake pads – BMW 3 Touring (E91). Tip from AUTODOC experts:

- Perform the replacement of brake pads in complete set for each axis. This provides effective braking.
- The replacement procedure is identical for all brake pads on the same axle.
- Please note: all work on the car – BMW 3 Touring (E91) – should be done with the engine switched off.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

1. Open the bonnet. Unscrew the brake fluid reservoir cap.
2. Secure the wheels with chocks.
3. Loosen the wheel mounting bolts. Use wheel impact socket #17.



4. Raise the front of the car and secure on supports.
5. Unscrew the wheel bolts.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts. BMW 3 Touring (E91)

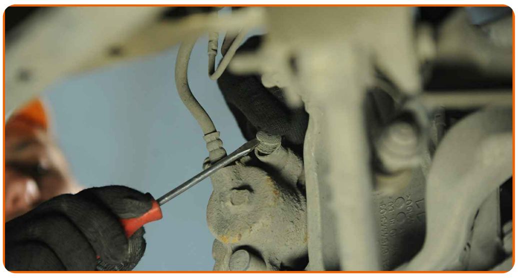
6 Remove the wheel.



7 Detach the brake caliper retaining spring. Use a flat screwdriver.



8 Remove the dust boot caps of the brake caliper guide pins. Use a flat screwdriver.



9 Spread the brake pads. Use a crowbar.



10 Clean the brake caliper fasteners. Use a wire brush. Use WD-40 spray.

11 Unscrew the brake caliper fastening. Use HEX No.H7. Use a ratchet wrench.



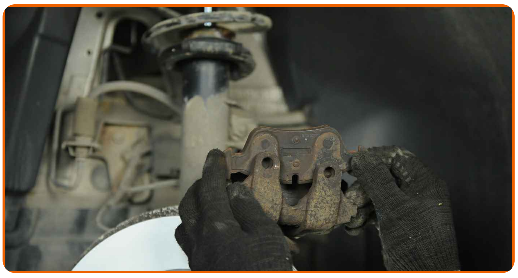
12 Remove the brake caliper.



Replacement: brake pads – BMW 3 Touring (E91). AUTODOC recommends:

- Tie the caliper to the suspension or to the body with a wire without disconnecting from the brake hose to prevent depressurization of the brake system.
- Make sure that the brake caliper is not hanging on the brake hose.
- Don't press the brake pedal after the brake caliper has been removed. As a result, the piston can fall out from the brake cylinder, and brake fluid leakage and depressurization of the system may occur.
- Check the brake caliper bracket, brake caliper guide pins and boots. Clean them. Replace, if necessary.

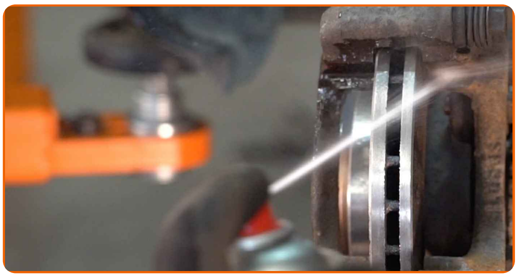
13 Remove the brake pads.



Replacement: brake pads – BMW 3 Touring (E91). Tip:

- Measure the brake disc thickness. Upon reaching the wear limit the part must be replaced.

14 Clean the brake caliper bracket from dirt and dust. Use a wire brush. Use a brake cleaner.



AUTODOC recommends:

- Replacement: brake pads – BMW 3 Touring (E91). After applying the spray, wait a few minutes.

15 Treat the brake caliper piston. Use a brake cleaner.



AUTODOC recommends:

- After applying the spray, wait a few minutes.

16 Press in the brake caliper piston. Use brake caliper wind back tool.



17 Treat the brake pads in the area where their surface comes into contact with the brake caliper bracket. Use anti-squeal paste.



Replacement: brake pads – BMW 3 Touring (E91). Tip:

- Make sure the disc surface is clean before installing the pads.

18 Install new brake pads.



Replacement: brake pads – BMW 3 Touring (E91). AUTODOC recommends:

- Make sure the pads are installed with linings facing the disc.

19 Install the brake caliper and fix it. Use HEX No.H7. Use a torque wrench. Tighten it to 30 Nm torque.



20 Install the dust boot caps of the brake caliper guide pins.



21 Install the brake caliper retaining spring. Use a flat screwdriver.



22 Treat the surface where the brake disc contacts the wheel rim. Use copper grease.



23

Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

- Replacement: brake pads – BMW 3 Touring (E91). After applying the spray, wait a few minutes.

24

Install the wheel.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. BMW 3 Touring (E91)

25

Screw in the wheel bolts. Use wheel impact socket #17.



26

Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 120 nm torque.



Replacement: brake pads – BMW 3 Touring (E91). AUTODOC recommends:

- Without starting the engine, press the brake pedal several times until you feel significant resistance.

27

Remove the jacks and chocks.



Replacement: brake pads – BMW 3 Touring (E91). Tip from AUTODOC:

- Check the brake fluid level in the expansion tank and refill if necessary.

28

Tighten the brake fluid reservoir cap. Close the hood.

AUTODOC recommends:

- Slow down smoothly for first 150-200 km after the brake pads replacement. Avoid unneccessary and sharp braking to a stop.

WELL DONE!

VIEW MORE TUTORIALS

AUTODOC — TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE

ⓘ DISCLAIMER:

The document contains only general recommendations that may be useful for you when you perform repair or replacement work. AUTODOC shall not be liable for any loss, injury, damage of property occurring in the repair or replacement process due to incorrect use or misinterpretation of the provided information.

AUTODOC shall not be liable for any possible mistakes and uncertainties in this guide. The information provided is for information purposes only and cannot replace advice from specialists.

AUTODOC shall not be liable for incorrect or hazardous usage of equipment, tools and car parts. AUTODOC strongly recommends to be careful and observe the safety rules when performing repair or replacement works. Remember: usage of low quality auto parts does not guarantee you the appropriate level of road safety.